

# **Stochastic and Diagnostic Analysis of Vocational Teachers' Attrition and Retention in Adamawa State, Nigeria**

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**ABSTRACT :** This study, entitled “Stochastic and Diagnostic Analysis of Vocational Teachers Attrition and Retention in Adamawa State” was conducted to find out the factors contributing to Vocational Teachers attrition and retention, and the strategies for curtailing the attrition. Three (3) research questions were formulated to guide the study. Pertinent literatures on the topic of study were reviewed. The design for the study was survey research design. The populations for the study were all the Vocational teachers in Adamawa State technical colleges and other government secondary schools. The instrument used for data collection was a well structured questionnaire. The data was collected through administering the questionnaires. The data was analyzed using a statistical mean rating. The results indicated that vocational teachers' attrition was as a result of negligence of teaching profession and poor salary structure, which in turn affect the students' performance. Lastly, recommendations were made accordingly to respective quarters that government should address the issue of negligence of teaching profession, improve the salary structure, improve standard of teaching profession, facilitate and encourage professional development and provision of incentive and regular in-service training for all vocational teachers.

**Keywords:** *Stochastic and Diagnostic, Attrition, Retention, Vocational Teachers*

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## **1.0 INTRODUCTION**

Statistical random behaviour in identifying the nature of gradual reduction of the size of a work force by means of natural events such as retirement, death, and resignation have a demoralizing effect on the remaining teachers in the work force (Macdonald,1999). Attrition of vocational teachers cannot be easily qualified; because there were numerous challenges that need be address properly, which lead to set back to the school, teachers and the students' performance (Webb, 1983).

Burgess, (1981) stated that teacher attrition can have either positive or negative effects on the school programmes. In a positive sense, attrition may be one way of naturally getting rid of incompetent teachers thus giving way to hiring new teachers who may be competent and who may introduce new programme contents, new policies and procedures to the existing school programme. The negative consequences might arise when the leavers are the best teachers or when the school programmes are undergoing rapid growth and development. In this sense, teachers' attrition lowers the overall effectiveness of the school and ultimately the quality of learning. Replacing high performing teachers might be very difficult thus decreasing the overall performance of the affected school. He further said that attrition could result in expenses associated with recruitment and selection of teachers and also loss of productivity until probably a new teacher has mastered the job.

Macdonald, (1999) ascertain that a demoralizing effect on the students and the remaining teachers. The individual teacher who remain in the work force might develop dissatisfaction simply by watching other teachers leave for other job opportunities. Tilburg, (1987) stated that when a staff quits, both the students and the remaining teachers suffer. There is disruption of service, the extra time and money spent on recruitment and training for replacement, as well as the additional stress of more work to the remaining staff members are the possible consequences suffered by the school organization as a result of attrition. The loss of teachers to the teaching profession is rarely distributed evenly across the teaching force. Attrition is highest in geographical locations where living conditions are extremely poor, harsh or expensive, or where teachers do not feel comfortable with the local ethnicity, customs, or language (Macdonald, 1999).

Hedges, (2002) ascertain that retention of teachers are most often due to sacrifice or based on the recognized need to keep in classroom, those teachers who are qualified and utilized effective teaching strategies, demonstrated by increased salary and student achievement year after year. A variety of strategies to increase retention of teachers are required to have a bond signed. If they leave teaching before their initial three year posting is completed, they are barred from further employment in the state sector and guarantor must repay the bounded amount. In practice, however, the value of the bond has been reducing by inflation, and the system is no longer enforced. Lack of enforcement has led to wide spread disapproving about the scheme. Macdonald, (1999) said that increasing salaries may appear to be obvious responds to attrition problems. However, there is little evidence that increase salary alone has a high long term impact on retention. Improving teachers physical, social and professional experience of work increases their commitment, reduces attrition, and is often cheaper than trying to tackle salary or the costs of teacher's dissatisfaction, loss and retraining.

Burgess, (1981) in the study on teachers shortage found out that attrition of agricultural teachers was due to low morale toward teaching, teacher-load which include matters such as record keeping, clerical work; community demand, extracurricular load, and keeping up to date professionally. In a study by (Phenethi, 1995) on the turnover of agricultural teachers in secondary school and higher school found that, lack of involvements of teachers in decision making, lack of support for teachers, poor working relationship between agricultural teachers and head teachers, limited mobility in teaching service, discriminatory practices against the promotion, high demand to attain class activities, failure to recognize outstanding performance of teachers, lack of in-service for agricultural teachers, supplies of equipment by school administration, attractive condition of service in other sectors of the economic were major factors associated with turnover of agricultural teachers. Against this background it is imperative to study the vocational teacher's attrition in secondary school in Adamawa state.

## **1.1 Statement of the Problem**

Vocational teachers leave their profession at higher rates than their general teachers educators, some leave the workforce to look for greener pasture jobs, because teachers use teaching as a stepping stone, and when they leave they are not replaced immediately, which led to the set back or lowers the overall effectiveness of the school quality and affect students performance (Billingsley, 1993). Vocational teachers also leave workforce for reasons that include poor salary, poor administrative support and training in curriculum (Kauffman and Farrel, 2002). This vocational teacher attrition affects the quality of teachers, restricts planning and programme continuity, increase allocations, for recruitment and hiring of teachers hinder

students learning (Shen and Herberg., 1997). Hence the need to study vocational teachers attrition and retention in Adamawa State.

## 1.2 Purpose of the Study

1. To identify factors that influence vocational Education teachers attrition.
2. To determine factors which contribute to teacher retention
3. To identify strategies for curtailing vocational teachers attrition

## 1.3 Research Questions

1. What are the factors that influence vocational educational teachers' attrition?
2. What are the factors contributing to vocational teachers' retention?
3. What are the strategies for curtailing vocational teacher attrition?

## 2.0 METHODOLOGY

Descriptive survey is the design that was used in this research work. The target populations for this study are all vocational teachers in Adamawa State technical colleges and other Government Secondary Schools. A sample of fifty six (56) vocational teachers was randomly selected from the three education zones in the State. The instrument that was used for data collection is questionnaire. The questionnaire was administered by the researchers with the help of four trained research assistance. The data was analyzed using descriptive statistical.

## 3.0 RESULT

### 3.1 Research Question One

What are the factors that influence vocational education teachers' attrition in Adamawa State?

**Table 1:** Factors That Influence Vocational Education Teachers Attrition in Adamawa State.

S/NO	ITEMS	$\bar{X}$	DECISION
1.	Poor salary structure influence vocational teachers to look for greener pasture work.	4.85	Agreed
2.	Luke-warm attitude by the government to teachers demand	4.41	Agreed
3.	Inadequate welfare package for vocational teachers	4.42	Agreed
4.	Inadequate incentive for vocational teachers	4.43	Agreed
5.	Vocational teachers leave workforce for lack of respect.	3.58	Agreed
6.	Inadequate re-training programme for vocational teachers	3.89	Agreed
7.	Workplace conditions	4.07	Agreed
8.	Dissatisfaction with workplace responsibilities	3.25	Disagreed

With reference to table 1 above, the results shows that items 1-7 of the research question one has been agreed by the respondent, with mean values of 4.85, 4.41, 4.42, 4.43, 3.58, 3.89 and 4.07 respectively. While item 8 is said to be disagreed by the respondent, with a mean value of 3.25. From the result, the likert rating scale rule stated that lower limit mean value range from 1.00-3.49 is said to be disagreed, while upper limit mean value range from 3.50-5.00 is said to be agreed. Therefore, from the result of table 1 above, items 1-7 said to be agreed because it falls within the range of upper limit mean value. While item 8 is said to be disagreed because it fall within the range of lower limit mean value.

### 3.2 Research Question Two

What are the factors contributing to vocational teachers' retention in Adamawa State?

**Table 2:** Factors that Contribute to Vocational Teachers Retention in Adamawa State

S/NO	ITEMS	$\bar{X}$	DECISION
1.	Vocational teachers stay in teaching for personal commitment and gratification.	2.91	Disagreed
2.	Vocational teachers take teaching as their future ambition	3.23	Disagreed
3.	Teachers enjoy the relationship with students and take pride in contributions they make to student learning	3.67	Agreed
4.	Satisfied with the level of job security at the school	2.48	Disagreed
5.	Satisfied with my salary	1.57	Disagreed
6.	Computers and other technological instrument for my classroom are sufficiently available in my school	1.60	Disagreed

It is deduce from table 2 above that items 1,2,4,5 and 6 of research question two is said to be disagreed by the respondent with mean values of 2.91, 3.23, 2.48, 1.57 and 1.60 respectively. While item 3 was agreed with a mean value of 3.67. From the result, the likert rating scale rule stated that lower limit mean value range from 1.00-3.49 is said to be disagreed, while upper limit mean value range from 3.50-5.00 is said to be agreed. Therefore, from the result of table 2 above, item 1,2,4,5 and 6 is said to be disagreed because it fall within the range of lower limit mean value, while item 3 is said to be agreed because it fall within the upper limit mean value.

### 3.3 Research Question Three

What are the strategies for curtailing vocational teachers' attrition in Adamawa State?

**Table 3:** Strategies for Curtailing Vocational Teachers Attrition in Adamawa State.

S/NO	ITEMS	$\bar{X}$	DECISION
1.	Facilitating and encouraging professional development activities for teachers	3.76	Agreed
2.	Encourage professional collaboration among teachers.	3.48	Disagreed
3.	Appoint highly qualified technical teachers as principals of vocational and technical schools	4.01	Agreed
4.	Offer opportunity for self improvement through in-service training	4.21	Agreed
5.	Provide enough working materials in all the schools workshop	3.89	Agreed
6.	Improvement of salary for all vocational teachers	4.00	Agreed
7.	Provision of incentive for all vocational teachers	4.03	Agreed
8.	Adequate welfare package for vocational teachers	3.69	Agreed
9.	Avoid incredible transfer of highly qualified vocational teachers.	3.51	Agreed
10.	Provide vocational teachers special allowance (Hazard allowance).	4.14	Agreed
11.	Provide adequate and relevant vocational textbooks in schools	3.76	Agreed
12.	Regular in-service training for all vocational teachers	4.00	Agreed
13.	Encourage on-the-job and off-the-job training	3.90	Agreed

From the table 3 above; the results shows that items 1,3,4,5,6,7,8,9,10,11,12 and 13 of research question three has been agreed by the respondent with mean values of 3.76, 4.01, 4.21, 3.89, 4.00, 4.03, 3.69, 3.51, 4.14, 3.76, 4.00 and 3.90 respectively. While item 2 is said to be disagreed by the respondent with a mean value of 3.48. from the result, the likert rating scale stated that lower limit mean value range from 1.00 – 3.49 is said to be disagreed, while upper limit mean value range from 3.50-5.00 is said to be agreed; therefore, from the result of table 3 above, items 1,3,4,5,6,7,8,9,10,11,12 and 13 is said to be agreed because the mean value falls within the upper limit while item 2 is said to be disagreed because the mean value obtained fall within the lower limit mean value.

#### 4.0 DISCUSSION OF RESULT

The result as in table 1 revealed that the factors that influence vocational education teachers' attrition include: poor salary structure, Luke-warm attitude by the government, inadequate welfare packages, inadequate incentives, lack of respect, inadequate re-training programmes and dissatisfaction with work place condition. This finding is in agreement with (Kauffman and Farrel, 2002) who said that vocational teachers leave workforce for reasons that include poor salary, poor administrative support and training in curriculum. Macdonald, (1999) also reported that the loss of teachers to the teaching profession is rarely distributed evenly across the teaching force and attrition is highest in geographical locations where living conditions is extremely poor, harsh, where teachers do not feel comfortable. Hedges, (2002) also reported that vocational teachers' attrition is as a result of economic factors, as teachers make rational economic decision about their careers and seek better paid work where they can. Bundy, (1999) also reported that teachers or instructors who work under a load that cannot possibly take satisfaction under the condition can only result in dissatisfaction and instability. The implication of the study is that the above mentioned factor causes attrition of vocational education teachers.

The result as in table 2 revealed that the factors that contribute to vocational teachers' retention include: personal commitment and gratification, taking teaching as their future ambition, satisfied level of job security and teachers enjoy the relationship with students and take pride in contributions they make to student learning. This findings was in agreement with Hedges (2002) who reported that retention of teachers are most often due to sacrifices, teachers taking teaching as their future ambition, teachers enjoy their relationship with students and take pride in contributions they make to student learning, improvement of salary for teachers, and adequate welfare reduce attrition. Bundy, (1999) also reported that vocational teachers' retention who work under a load that cannot possibly take satisfaction under these condition can only result in dissatisfaction and instability. The implication of the findings is that the above mentioned factors contribute to vocational teachers' retention.

The result shows that, the strategies for curtailing vocational teachers attrition includes facilitating and encourage professional development, appoint highly qualified technical teachers as principals of vocational technical schools, offer opportunity for self improvement through in-service training, provide enough working materials in all schools, improve salary for vocational teachers, improve welfare packages for teachers, avoid incredible transfer, provide special allowances for vocational teachers, provide adequate instruction materials, regular in-service training for all vocational teachers and encourage on-the-job and off-the-job training. The finding is in agreement with Hedges (2002) who reported that increasing teachers salaries, provision of special allowance to teachers, adequate provision of incentive for all teachers, encourage professional development activities of teachers and adequate welfare packages for teachers curtail vocational teacher's attrition. Macdonald, (1999) also reported that increasing salaries may appear to be obvious response to attrition problems and improving teachers physical, social and professional experience of work increases their commitment reduce attrition. Kauffman and Farrel, (2002) also reported that vocational teachers also leave workforce for reasons that include poor salary, poor administrative support and training in curriculum.

## 5.0 CONCLUSION

Based on the findings, it would be concluded that attrition of vocational teachers is as a result of negligence of the teaching profession that make some vocational teachers to leave teaching profession in Adamawa state. Vocational teachers' attrition restricts planning and programme continuity; as a result, it affects the quality of teachers and hinders students learning. Attrition makes qualified teachers leave the teaching for greener pasture work as a result of poor salary structure and other factors. Vocational teachers use teaching as a stepping stone, and when they leave, they are not replaced immediately, which lead to the set back or lowers the overall effectiveness of the school quality and affect students performance. This attrition has a demoralizing effect on the students and the remaining teachers in the work-force who might develop dissatisfaction simply by watching other teachers leave for better paid job.

## 6.0 RECOMMENDATION

Based on the factors identified to be affecting the vocational teachers attrition and the strategies proffered for curtailing the attrition the following recommendations are made:-

- The Adamawa state Government should address the issue of negligence of teaching profession properly, and look into these problems that affect the retention of vocational teachers in teaching profession.
- The welfare of vocational teachers should be paramount in the mind of all stakeholders to reduce the attrition of vocational teachers.
- Adamawa state Government should improve the salary structure and allowances of vocational teachers appropriately.
- The government should also improve the standard of teaching profession to motivate vocational teachers that use teaching profession as a stepping stone so as to retain them in the profession.
- Facilitating and encouraging professional development, provision of incentive and regular in-service training for all vocational teachers to curtail dissatisfaction of vocational teachers must not be neglected too.
- Lastly, the Government should make it a point of duty to fund and provide the necessary facilities and equipment for vocational education at all levels of secondary schools in Adamawa state.

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